

NOV 21 2005

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FACSIMILE TRANSMISSION

November 21, 2005

TO: U.S. PATENT AND TRADEMARK OFFICE

ATTN: COMMISSIONER FOR PATENTS

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TELEPHONE:

FROM: Stephen T. Boughner

RE: COMMUNICATION TO THE EXAMINER

YOUR REFERENCE: 1997P08121 US01

OUR DOCKET: 1454.1189

NO. OF PAGES (Including this Cover Sheet) 9

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COMMENTS:

NOV 21 2005

S&H Form: (2/01)
DOCKET NO. 1454.1189

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Gustavo DECO et al.

Serial No: 09/530,983

Group Art Unit: 3762

Confirmation No. 5072

Filed: May 8, 2000

Examiner: OROPEZA, FRANCES P

For: ARRANGEMENT FOR PREDICTING AN ABNORMALITY OF A SYSTEM AND FOR
IMPLEMENTING AN ACTION OPPOSING THE ABNORMALITY (As amended)

COMMUNICATION TO THE EXAMINER

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

A copy of the Information Disclosure Statement filed on May 8, 2000 in the above-referenced application is attached. Referring to Form PTO-1449 (copy enclosed) submitted with the Information Disclosure Statement, the Examiner confirmed consideration of all references, except reference "AM". However, the relevance of reference AM is set forth in the similarly attached International Search Report included with the May 8, 2000 IDS.

Accordingly, the Examiner is requested to consider reference AM, and indicate that the reference has been considered by initialing next to the citation and returning a copy of Form PTO-1449.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 11/21/05

By: [Signature]

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Registration No. 45,317

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BOX PCT
IN THE UNITED STATES DESIGNATED/ELECTED OFFICE
OF THE UNITED STATES PATENT AND TRADEMARK OFFICE
UNDER THE PATENT COOPERATION TREATY--CHAPTER II

5 APPLICANT(S): GUSTAVO DECO ET AL.
ATTORNEY DOCKET NO.: P00,0861
INTERNATIONAL APPLICATION NO: PCT/DE98/03229
INTERNATIONAL FILING DATE: 05 NOVEMBER 1998
INVENTION: ARRANGEMENT FOR PREDICTING AN ABNORMALITY OF A SYSTEM AND FOR IMPLEMENTING AN ACTION OPPOSING THE ABNORMALITY

10 Assistant Commissioner for Patents,
Washington D.C. 20231

INFORMATION DISCLOSURE STATEMENT

According to 37 C.F.R. §1.97(b)

Sir:

15 In accordance with the provisions of 37 C.F.R. §1.56 and the requirements of 37 C.F.R. §1.98, Applicant respectfully requests that a citation and examination of the references identified on the attached PTO 1449 form be made during the course of examination of the above-identified application for United States Patent.

20 The present Information Disclosure Statement is being filed according to
37 C.F.R. §1.97(b) and before the latter occurrence of:

- 25
- (1) three months from the filing date of a national application;
 - (2) three months from the date of entry of the national stage as set forth in 37 C.F.R. §1.491 in an international application;
 - or
 - (3) the mailing date of a first Office Action on the merits.

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REMARKS

The attached PTO 1449 form lists prior art references identified in the International Search Report, copy of which is enclosed herewith.

- | | | |
|------------------|----|---|
| | AA | United States Patent 5,251,626 |
| 5 | AB | United States Patent 4,889,526 |
| | AE | German reference DE 43 37 110 |
| | AF | International application WO 96/36860 |
| | AG | German reference DE 196 04 803 |
| | AH | International application WO 95/10075 |
| 10 | AI | German reference DE 195 31 967 |
| <u>Articles:</u> | | |
| | AM | D. Hoyer et al., "GRUNDLAGEN UND ERFAHRUNGEN
ZUR MODELLIERUNG CHAOTISCHER
ATTRAKTOREN DER
15 HERZFREQUENZFLUKTUATIONEN MIT
KUNSTLICHEN NEURONALEN NETZEN" Vol. 40,
July (1995), pp. 190-194, XP-002097627 |
| | AN | L. Machado et al., "SEQUENTIAL VERSUS STANDARD
20 NEURAL NETWORKS FOR PATTERN RECOGNITION:
AN EXAMPLE USING THE DOMAIN OF CORONARY
HEART DISEASE", Computers in biology & medicine, Vol.
27, No. 4, July (1997), pp. 267-281, XP002097626 |
| | AO | G. Deco et al., "Determining the Information Flow of
25 Dynamical Systems from Continuous Probability
Distributions", The American Physical Society, Physical
Review Letters, Vol. 78, No. 12, March (1997),
pp. 2345-2348 |
| | AP | C. Schittenkopf et al., "Testing nonlinear Markovian
30 hypotheses in dynamical systems, Physica D104, (1997),
pp. 61-74 |

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-3-

- 5 AQ J. Herz et al., "Introduction to the Theory of Neural
 Computation", Lecture Notes Vol. 1, (1991), pp. 197-250
- AR G. Deco et al., "An Information Theoretic Approach to
 Neural Computing", Chapter 7, (1996), pp. 170-186
- AS B. Gluckman, et al., "Electric Field Suppression of
 Epileptiform Activity in hippocampal Slices,
 Rapid Publication, Journal of Neurophysiology 76, (1996),
 pp. 4202-4205

Explanation of Relevance

10 References AA, AB, AE-AF, and AM were all identified in the
International Search Report. References AO-AS were discussed in the
specification. Reference AE is a German Patent discussing an operating system
that uses a neural network to analyze an electrocardiograph to determine heart
rhythm disturbances. Reference AG is a German Patent discussing a system
15 condition monitor that uses chaos theory. Reference AI is a German Patent
discussing a training method for a neural network. Reference AN discusses the
use of neural networks for pattern recognition for heart disease.

 English abstracts for German Patents AE, AG, and AI have been
provided. Full translations will be provided to the Examiner upon request.

20 The filing of the present Information Disclosure Statement is not to be
construed as a representation that a search has been made, and is not to be
construed as an admission that the information cited in the present Information
Disclosure Statement is, or is considered to be, material to patentability as defined
in 37 C.F.R. §1.56(b).

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The above citation of prior art is not a representation that such art constitutes a complete or exhaustive listing of all pertinent prior art, nor that it necessarily includes the closest or most relevant art. The aforementioned citation comprises a voluntary citation of prior art of which applicant and his attorney are presently aware and is not intended to serve as a substitute for the Examiner's own search.

Submitted by,

 (Reg. No. 28,982)

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Attorney for Applicant(s)

10

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Nov-21-05 15:15 From:STAAS & HALSEY

NOV 21 2005 T-870 P.007/008 F-710

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PCT/DE98/03229

Sheet 1 of 1

Form P.T.O. 1449		U.S. Department of Commerce Patent and Trademark Office			Docket No. P00,0861	Serial No. New Application		
LIST OF PRIOR ART CITED BY APPLICANT (use several sheets if necessary)					Applicant(s) GUSTAVO DECO ET AL.			
					Filing Date Herewith		Group Art Unit	
U.S. PATENT DOCUMENTS								
Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If appropriate	
	AA	5,251,626	12 Oct 1993	Nickolls et al.				
	AB	4,889,526	26 Dec 1989	Rauscher et al.				
	AC							
	AD							
FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation Yes No	
	AE	DE 43 37 110	03 Nov 1994	Germany				
	AF	WO 96/36860	21 Nov 1996	PCT				
	AG	DE 196 04 803	10 Oct 1996	Germany				
	AH	WO 95/10075	13 Apr 1995	PCT				
	AI	DE 195 31 967	11 Sept 1997	Germany				
	AJ							
	AK							
	AL							
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
	AM	D. Hoyer et al., "GRUNDLAGEN UND ERFAHRUNGEN ZUR MODELLIERUNG CHAOTISCHER ATTRAKTOREN DER HERZFREQUENZFLUKTUATIONEN MIT KUENSTLICHEN NEURONALEN NETZEN" Vol. 40, July (1995), pp. 190-194, XP-002097627						
	AN	L. Machado et al., "SEQUENTIAL VERSUS STANDARD NEURAL NETWORKS FOR PATTERN RECOGNITION: AN EXAMPLE USING THE DOMAIN OF CORONARY HEART DISEASE", Computers in biology & medicine; Vol. 27, No. 4, July (1997), pp. 267-281, XP002097626						
	AO	G. Deco et al., "Determining the Information Flow of Dynamical Systems from Continuous Probability Distributions", The American Physical Society, Physical Review Letters, Vol. 78, No. 12, March (1997), pp. 2345-2348						
	AP	C. Schuonkopf et al., "Testing nonlinear Markovian hypotheses in dynamical systems, Physica D104, (1997), pp. 61-74						
	AQ	J. Herz et al., "Introduction to the Theory of Neural Computation", Lecture Notes Vol. 1, (1991), pp. 197-250						
	AR	G. Deco et al., "An Information Theoretic Approach to Neural Computing", Chapter 7, (1996) pp. 170-186						
	AS	B. Ghuckman, et al., "Electric Field Suppression of Epileptiform Activity in hippocampal Slices, Rapid Publication, Journal of Neurophysiology 76, (1996), pp. 4202-4205						
Examiner				Date Considered				
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>								

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Sheet 1 of 1

Form P.T.O. 1449

U.S. Department of Commerce
Patent and Trademark OfficeDocket No.
P00,086109/530983
New Application

Applicant(s)

GUSTAVO DECO ET AL.

Filing Date
Herewith

Group Art Unit

LIST OF PRIOR ART CITED BY APPLICANT
(use several sheets if necessary)**U.S. PATENT DOCUMENTS**

Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If appropriate
JPO	AA	5,251,626	12 Oct 1993	Nickolls et al.			
JPO	AB	4,889,526	26 Dec 1989	Rauscher et al.			
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FOREIGN PATENT DOCUMENTS

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JPO	AE	DE 43 37 110	03 Nov 1994	Germany				
JPO	AF	WO 96/36860	21 Nov 1996	PCT				
JPO	AG	DE 196 04 803	10 Oct 1996	Germany				
JPO	AH	WO 95/10075	13 Apr 1995	PCT				
JPO	AI	DE 195 31 967	11 Sept 1997	Germany				
	AJ							
	AK							
	AL							

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JPO	AN	L. Machado et al., "SEQUENTIAL VERSUS STANDARD NEURAL NETWORKS FOR PATTERN RECOGNITION: AN EXAMPLE USING THE DOMAIN OF CORONARY HEART DISEASE", Computers in biology & medicine; Vol. 27, No. 4, July (1997), pp. 267-281, XP002097626
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JPO	AS	B. Gluckman, et al., "Electric Field Suppression of Epileptiform Activity in hippocampal Slices, Rapid Publication, Journal of Neurophysiology 76, (1996), pp. 4202-4205

Examiner

James P. Oropay

Date Considered

11/6/01

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